

ABSTRACT OF THE DISCLOSURE

An induction heating roller, a fixing apparatus and an image forming apparatus are disclosed as including a heating roller (TR) comprised of a hollow roller base body (BB), composed of electrically insulating material, and a plurality of secondary coil components (ws), composed of closed circuits, respectively, which are formed over the roller base body. The heating roller (TR) internally receives an induction coil unit (IC) including a primary coil (wp) which is coupled with the secondary coils in a core-less transformer coupling relationship. The secondary coil components (ws) of the heating roller (TR) have a secondary resistance value (R_a) which is nearly equal to a secondary reactance (X_a), i.e. in case of $R_a/X_a = \alpha$, a formula is expressed as $0.1 < \alpha < 10$. Further, the primary coil (wp) of the induction coil unit (IC) is comprised of a plurality of coil components which are connected between a wire pair (WP) in parallel to one another.